

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level, North Pacific Ocean, June 1933, at selected stations

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Point Barrow.....	29.88	-0.11	30.18	3	29.50	26
Dutch Harbor.....	29.92	+0.02	30.52	30	29.30	21
St. Paul.....	29.90	+0.04	30.42	30	29.38	22
Kodiak.....	29.92	+0.01	30.34	20	29.44	1
Juneau.....	29.94	-0.07	30.41	11	29.52	1
Tatoosh Island.....	30.07	+0.05	30.31	19	29.56	8
San Francisco.....	29.98	+0.02	30.12	19	29.83	13
Mazatlan.....	29.88	-0.02	29.96	4	29.78	13
Honolulu.....	30.07	+0.03	30.16	30	29.93	10
Midway Island.....	30.09	+0.04	30.28	30	30.00	1, 2, 10, 11
Guam.....	29.83	-0.04	29.92	2	29.76	15, 18, 19
Manila.....	29.78	-0.04	29.86	8	29.68	24
Naha.....	29.77	+0.02	29.90	8, 22, 23	29.58	17
Chichishima.....	29.90	-0.01	30.04	28	29.70	7, 15
Nemuro.....	29.86	—	30.20	27	29.54	7

NOTE.—Data based on 1 daily observation only, except those for Juneau, Tatoosh Island, San Francisco, and Honolulu, which are based on 2 observations. Departures are computed from best available normals related to time of observation.

Cyclones and gales.—Cyclonic activity on the North Pacific during June 1933 was mostly of a mild type. Few gales were reported and those were mostly of moderate to fresh force (7-8). The highest velocity (force 10) known to occur was experienced by the British motor ship *Silverguava* on the 3d near 36° N., 125° W., during the brief existence of a small low off the central California coast. Another gale, but of fresh force only, occurred in the same locality on the 30th. West of the 180th meridian scattered gales were encountered on a few days; only one attained a force as high as 9. Two occurred in the Far Eastern tropics due to moderate depressions of the 2d and 15th. The lowest corrected pressure of the month was 29.11 inches, reported by the American steamer *President Jackson* near 35° N., 153° E. on the 17th.

A fresh southeast gale (lowest pressure 29.65) accompanied by shifting winds, owing perhaps to a short-lived

cyclone, was encountered by the American steamer *Steel Exporter*, near 14° N., 102° W.

Fog.—Fog was by far the most important meteorological element on the North Pacific this month in its adverse effect upon navigation. Along the steamer routes north of the fortieth parallel fog was reported as occurring on 2 to 8 or more days in each 5° square traversed, with the area of least prevalence lying between the Washington-Oregon coast and 145° west longitude. Along the California coast it was noted on 12 days between Eureka and Point Arguello, and on 11 days thence southward to Lower California. Along the length of the Lower California coast fog was reported on 15 days. It is evident that frequent fogs occurred in the Bering Sea, since meager reports from between the sixtieth parallel and Nome indicate its formation on at least 10 days. The American steamer *Lurline* was reported delayed by fog 1 hour on the 15th in entering Los Angeles Harbor. The British steamer *City of Vancouver* reported continuous fog and inability to take position observations from the 16th to 22d along latitudes 47°-48° N., between longitudes 169° E. and 148° W.

SOUTHWEST MONSOON IN ARABIAN SEA AND BAY OF BENGAL, JUNE 1933

According to reports received from the American steamer *Yomachichi*, the southwest monsoon was active in the Gulf of Aden and the Arabian Sea during the early part of June. On the 10th, east of Sokotra Island, the observed velocity had risen to force 8.

The British motor ship *Cingalese Prince*, crossing the lower waters of the Bay of Bengal to Ceylon from the 17th to 20th, reported a steady monsoon current of moderate force. On the 25th and 26th, between longitudes 60° and 55° E., the force of the southwesterly winds ranged generally between 7 and 9, but rose at times to whole gale force (10).—W. E. H.